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10/661,923	09/12/2003	Richard H. Goldbaum	CH2911USNA	8399

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E I DU PONT DE NEMOURS AND COMPANY  
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BARLEY MILL PLAZA 25/1128  
4417 LANCASTER PIKE  
WILMINGTON, DE 19805

EXAMINER
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NGAMPA, BRIGET P

ART UNIT	PAPER NUMBER
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1709

MAIL DATE	DELIVERY MODE
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06/27/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/661,923

Applicant(s)

GOLDBAUM ET AL.

Examiner

Briget P. Ngampa

Art Unit

1709

**Period for Reply** - The MAILING DATE of this communication appears on the cover sheet with the correspondence address -

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on 9/12/03.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 10-12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 13-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 10/03/1/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-9, 13-15, drawn to method of modifying a polymer and the species of printing, classified in class 427, subclass 314.
- II. Claims 10-12, drawn to a different product, classified in class 428, subclass 525.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make another and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the method of modifying a polymer as claimed can be made by a materially different process such as modifying the surface upon extrusion and then cooling.

Restriction for examination purposes as indicated is proper because all these inventions listed in this action are independent or distinct for the reasons given above and there would be a serious search and examination burden if restriction were not required because one or more of the following reasons apply:

- (a) the inventions have acquired a separate status in the art in view of their different classification;
- (b) the inventions have acquired a separate status in the art due to their recognized divergent subject matter;

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(c) the inventions require a different field of search (for example, searching different classes/subclasses or electronic resources, or employing different search queries);

(d) the prior art applicable to one invention would not likely be applicable to another invention;

(e) the inventions are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

**Applicant is advised that the reply to this requirement to be complete must include (i) an election of a invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.**

The election of an invention may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected invention.

If claims are added after the election, applicant must indicate which of these claims are readable upon the elected invention.

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Should applicant traverse on the ground that the inventions are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

This application contains claims directed to the following patentably distinct species printing and dyeing, thermobonding laminating applying adhesive. The species are independent or distinct because claims to the different species recite the mutually exclusive characteristics of such species. In addition, these species are not obvious variants of each other based on the current record.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 1-15 are generic.

There is an examination and search burden for these patentably distinct species due to their mutually exclusive characteristics. The species require a different field of search (e.g., searching different classes/subclasses or electronic resources, or employing different search queries); and/or the prior art applicable to one species would not likely be applicable to another species; and/or the species are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

**Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species to be examined even though the requirement**

may be traversed (37 CFR 1.143) and (ii) **identification of the claims encompassing the elected species**, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141.

3. During a telephone conversation with attorney Mayer on 3/21/2007 a provisional election was made with traverse to prosecute the invention of the method of modifying a polymer and the species of printing, claims 1-9 and 13-15. Affirmation of this election must be made by applicant in replying to this Office action. Claims 10-12 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant in claim 13 recites "an improved method". This limitation is unclear for failing to show the basis for the improvement (Improved from what?).

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of 35 U.S.C. 102(b) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 and 13-15 are rejected under 35 U.S.C. 102(b) as being unpatentable over Raiford et al. (patent number 6,063,474, hereafter '474)

4. With respect to claim 1: '474 teaches a method for temporarily suppressing the repellency [col 3, line 28] of an extruded or molded object [col 4, line 10], said object comprising a mixture of a polyolefin polymer [col 3, line 31] and a fluorocarbon/hydrocarbon ester [col 3, line 32-33], comprising heating the object to a

temperature of above 40°C [col 6, line 53-57], holding for at least 10 seconds and cooling to about ambient temperature.

5. With respect to claim 2, '474 teach the heating temperature is above about 60°C and the holding time is above about 1 minute. [Table 2].

6. The method of claim 3 wherein the heating temperature is from about 70°C to about 150°C and the holding time is from about 1 to about 5 minutes [table 2].

7. With respect to claim 5, '474 teaches that the object is selected from the group consisting of fibers, filaments, fabrics, films, sheets, nonwoven, molded articles, shaped articles, and solid objects [col 3, line 48-50].

8. With respect to claim 6, '474 teach the object being a nonwoven fabric [col 3 line 56-57].

9. With respect to claim 13, '474 teaches an improved method of making extruded or molded objects having a modified surface wherein a fluorocarbon/hydrocarbon ester is added to a polyolefin prior to extrusion or molding [col 3, line 62-67] wherein the improvement comprises incorporating a heating and cooling step prior to modification of the surface of the object [col 7, example 1].

10. With respect to claim 14, '474 teach that heating is to a temperature above 40°C for at least 10 seconds [col 8, table 2].

11. With respect to claim 15, heating is to a temperature of from about 70°C to about 150°C for a time of from about 1 minute to about 15 minutes [col 9, table 2].



***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 7, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Raiford et al. (patent number 6,063,474, hereafter '474) as applied to claims 1-6 above, and further in view of Clark et al. (patent number 6,969,166 B2, hereafter '166).

14. With respect to claim 7 and 8, '474 teaches modifying a surface of an extruded or molded object, said object comprising a mixture of a polyolefin polymer and a fluorocarbon/hydrocarbon ester [col 7, line 40-43], comprising heating the object to a temperature of above 40°C for at least 10 seconds [table 2], cooling the object to about ambient temperature. '474 does not teach applying a surface modifier to the object within a period of about 48 hours after said cooling nor does it teach that a surface modifier is selected from the group consisting of printing. '166 teaches taking a molded polyolefin and printing on it at room temperature [col 15, line 23-33]. Therefore, it would have been obvious to one of ordinary skills in the art, at the time the invention was made to have printed the ink of '166 on the molded polyolefin of '474 because it is a known method of further treating a polyolefin object. As far as within 48 hours, processing would have been done within that time in order to expedite processing and one of ordinary skills in the art understand that expedite processing leads to increase efficiency.

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15. With respect to claim 9, the heating temperature is from about 70°C to about 150°C and the holding time is from about 1 to about 15 minutes [col 8, table 2]

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Briget P. Ngampa whose telephone number is 571-270-1866. The examiner can normally be reached on M-F, 830-430PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Cleveland can be reached on 571-272-1418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BPH  
Bpn

  
MICHAEL B. CLEVELAND  
SUPERVISORY PATENT EXAMINER